



BrightFields, Inc.
Environmental Services

August 21, 2018

Ms. Kelly L. Bunker
Environmental Scientist
U.S. EPA Region 3
Land and Chemicals Division
Toxics Programs Branch (3LC61)
1650 Arch Street
Philadelphia, PA 19103

**RE: Self-Implementing PCB Cleanup Notification/Cleanup Plan
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware
BrightFields File # 3150.13.52**

Dear Ms. Bunker:

BrightFields, Inc. (BrightFields) has prepared this Self Implementing Cleanup Notification and Cleanup Plan to outline the proposed additional characterization, remediation, and confirmation of polychlorinated biphenyls (PCBs) identified at the Former Rodney Dorm Complex (Site) located in Newark, Delaware. PCB contamination was identified in association with four transformers and a suspected former transformer/generator pad located within vacant dormitory buildings during a brownfield investigation (BI) conducted by BrightFields in 2017. Specifically, PCB contamination was identified in the vicinity of visible staining on concrete pads/floors adjacent to the transformer equipment. The dates of the PCB release(s) are unknown, but they are believed to be historic. The work outlined herein will be conducted in accordance the Toxic Substance Cleanup Act (TSCA) Self-Implementing Cleanup program (40 CFR 761.61(a)). Based on the planned future reuse of the Site, the developer wishes to achieve a cleanup goal consistent with the TSCA High Occupancy standard of < 1 ppm PCBs remaining.

SITE BACKGROUND

The Site, currently owned by the University of Delaware, is located at 103 Hillside Road in Newark, Delaware (New Castle County tax parcel number 18-019.00-296) and encompasses approximately 7.24 acres (Figure 1).

The Site includes six former residential dormitory buildings (A through F) with common lounges, a dining hall, and Power House building (utility building) which houses the boilers, main transformers, and power switchgears. The dormitory buildings have a shared basement space which was formerly used for utility closets, storage space, study space, a post office area, and inter complex utility connections. The northern portion of the site includes tennis, basketball, and volleyball courts, open grass areas, walking paths, and parking areas. The

dormitory buildings and the western half of the site have been unoccupied since 2014 and are currently enclosed within a chain-link fence. The developer intends to construct a stormwater management feature along with accompanying recreational amenities on the Site.

In anticipation of Site redevelopment activities, a BI was performed on the Site by BrightFields in 2017. In addition to performing a general site characterization, BrightFields targeted four (active) oil-filled transformers as well as a pad suspected of supporting a former (fifth) transformer/generator. The current and former transformers were all located within basement utility rooms/power house within the complex. Evidence of a release (staining on the concrete pads/floors) was noted at the base of some of the transformer locations. All four active transformers displayed labels indicating that they contained PCB-contaminated fluid (>50 parts per million (ppm) total PCBs but less than 500 ppm total PCBs).

In order to further evaluate the potential release of PCBs, concrete and sub-slab soil samples were collected from within the shared basement utility rooms in Buildings A/B, C/D, E/F and the Power House Building (Figure 2) A total of five sub-slab soil samples, 10 concrete samples, and four transformer oil samples were collected and analyzed for PCBs using a combination of EPA Methods 8082 and 680. Concrete samples were collected by means of a hammer drill that was advanced to various depths to generate concrete fines for sampling. Sub-slab soil samples were collected by core-drilling through the slab approximately 4 to 6 inches to allow the advancement of a hand auger. Figure 2 shows the general locations of samples within the structures, and Tables 1, 2 and 3 include analytical results for the transformer oil, concrete flooring, and sub-slab soil. Laboratory analytical reports are included as Attachment A.

Based on the results of the BI sampling, PCBs were detected in some transformer oil, concrete, and in one case, sub-slab soil. Three of the four transformers (A/B, C/D, and E/F) were determined to contain PCB oil, while the fourth transformer (PH) was determined to be PCB-free. Seven of the ten samples of concrete collected from stained transformer pads and adjacent flooring indicated PCBs were present at detectable levels within the concrete flooring, up to a maximum concentration of 19 mg/kg. Coring/drilling activities indicated that the concrete floor slab is approximately 4-6 inches thick, and that the transformer pads extend an additional 4 inches above the floor level. Analytical results for PCB samples collected during the BI are presented in Tables 1, 2 and 3.

A Final Plan of Remedial Action (FPRA) was issued by DNREC-SIRS for the Site on June 6, 2018. The FPRA specifically identifies the transformers and associated PCB releases at the powerhouse and in buildings A/B and C/D as areas of concern which will require further delineation. Further characterization is necessary and justified under EPA and DNREC-SIRS guidance, because the releases are associated with PCB-contaminated electrical equipment, and PCB concentrations exceed both TSCA and DNREC regulatory thresholds.

BrightFields also believes that additional characterization would provide greater data resolution and remove potential data gaps. During the BI, some of the concrete sample depths exceeded three inches, which potentially diluted PCBs that may have been



concentrated in the flooring surface. A sub-slab soil sample contained total PCBs at low concentrations (less than 1 ppm), which may be the result of contamination by concrete fines from the overlying (contaminated) concrete sluffing into the sample. Additional characterization at all current and former transformer locations will also close the data gap regarding the status of flooring immediately underlying each transformer, which has not been sampled due to the continued use of the transformers through the present day.

ADDITIONAL CHARACTERIZATION

BrightFields intends to characterize the concrete pads/flooring around the five transformer locations in a manner consistent with the methods prescribed in 40 CFR 761 Subpart N. Due to the limited space within the transformer rooms, a 1-meter square grid will be used in lieu of the suggested 3-meter square grid. The grids, with axes oriented to magnetic north-south and east-west, will be overlaid on the transformer pad areas in each location. Figures 3 through 6 show the proposed characterization sample layout. The total area to be sampled will be four square meters with a total of nine grid nodes at each of the five transformer locations.

A previously unknown floor drain/conduit was identified by BrightFields in the vicinity of PH2 in the powerhouse electrical room (Figure 3). As-built drawings for the powerhouse do not indicate the presence of a floor drain network. Due to the proximity of floor staining, BrightFields intends to sample accumulated sediment to determine if PCB-contaminated materials are present in the drain/conduit. BrightFields will trace the drain/conduit to determine the length and outlet, if any. Accumulated sediment will be sampled at the base of the drain conduit, and at the next two nearest locations identified during the tracing effort. The approximate location of the floor drain is shown in Figure 3. Sediment samples will be collected using dedicated, sterile scoops.

Due to the potential for creating dust during concrete sampling (containing both silica and possibly PCBs), BrightFields will adhere to the OSHA Silica Standard to limit worker exposure. BrightFields will utilize methods described in 29 CFR 1926.1153(c) ("Table 1 Tasks"), which include the use of respiratory protection by trained and medically monitored personnel. It is anticipated that the dust suppression techniques and PPE used to control exposure to silica will also minimize worker exposure to concrete dust impacted with PCBs. As an additional safety measure, intermittent dust monitoring will be performed during all intrusive activities. BrightFields will adhere to OSHA's action level of 25 ug/m³ for respirable silica.

Concrete characterization samples will be collected from each of the designated grid nodes using a hammer drill. A 1-inch bit will be used to advance a boring to a depth of 7.5 cm (approximately three inches), after which the concrete fines will be collected as a sample. Following advancement of the shallow (0 to 7.5 cm) borings, the borings and surrounding floor will be cleaned using a HEPA-filtered vacuum. Each boring will then be extended to a termination depth of 15 cm (approximately 6 inches) and the concrete fines will be collected



as a second (deep) sample. A total of 18 concrete samples (nine deep and nine shallow) will be collected from each location.

Between each boring location and between boring depths, non-dedicated equipment (hammer drill bit, scoopula, etc.) will be decontaminated using an approved solvent (hexane) and the swabbing method described in 40 CFR Part 761.79(c)(2)(i), followed by washing with a solution of Alconox and water and a final rinse with deionized water.

The initial round of surficial concrete samples and sediment samples will be activated for PCB analysis on a 5-day turnaround time at TestAmerica Laboratories (TestAmerica) of Edison, New Jersey. Sample extraction will be performed using EPA Method 3540C and sample analysis will be performed using EPA Method 8082. If any shallow concrete concentrations exceed 1 ppm of PCBs, the corresponding deep concrete sample will be activated for PCB analysis using the same procedures.

Based on the results of the additional characterization, BrightFields will prepare figures identifying the “clean edge” (where PCBs in concrete are less than 1 ppm) for each transformer/pad location and the floor drains. If concentrations at the edge of the grid exceed 1 ppm for PCBs, the grid will be expanded, and additional nodes sampled until a clean edge is identified.

REMEDIATION OF PCB-IMPACTED MATERIALS

Pre-Remedial Action Tasks

Prior to the start of characterization activities, the four transformers will be decommissioned by others. All four transformers will be de-energized and disconnected from the service mains prior to decommissioning. A licensed electrician will verify that the transformers are fully de-energized. The exteriors of the transformers will be disassembled, and the contents drained, containerized, and properly labeled for disposal. The transformer shells will be re-sealed, wrapped in plastic, properly labeled, and removed from the pads. The transformer oil and the shells will both be transported and disposed by a licensed waste transport and disposal facility. Waste profiles for the transformers will be prepared using the analytical data generated from the previous transformer oil samples. All transformer decommissioning activities will be conducted by workers with OSHA 40 Hour HAZWOPER training.

Prior to removing the concrete flooring, BrightFields will prepare a waste profile for disposal facility acceptance. The estimated volume of material for removal is approximately 45 tons.

Remedial Tasks

All site personnel will review the site-specific Health & Safety Plan as well as appropriate Job Hazard Analysis (JHA) forms. Workers will wear appropriate Personal Protection Equipment (PPE) to prevent dermal contact with, and inhalation of, PCB-impacted materials. Due to the potential for creating dust (containing both silica and possibly PCBs),



BrightFields will adhere to the OSHA Silica Standard and perform intermittent dust monitoring, as described in BrightFields' site-specific Health and Safety Plan.

Each work area will be supplied with temporary lighting, a fan/duct to provide fresh air to workers, and a containment to isolate the affected electrical room from the remainder of the building. After verifying that no subsurface utilities/obstructions are present in the work area, the previously-defined boundaries of the PCB-impacted areas will be saw-cut at the "clean edge" identified during characterization sampling. Workers will then utilize chipping hammers and/or jackhammers to reduce the impacted floor areas to manageable pieces for manual removal. If floor drains/conduit contain impacted sediment, the entire length of pipework will be removed to the first location where PCBs were found at concentrations less than 1 ppm in sediment. Impacted concrete and pipework will be staged in plastic-lined roll-off dumpsters staged as near as possible to the basement entrance; the pathway between the work area and the dumpster will be covered with plastic to catch incidental spills/debris. At the end of the work day, the work area will be secured and the roll-off covered and secured. Access to both the dumpster and the work area is restricted by a site-wide security fence.

Due to the nature of the remedial processes, decontamination will be limited. Used PPE and plastic sheeting will be disposed with the impacted material. Hand tools, non-porous media such as shovels, and all other non-dedicated equipment will be decontaminated with a solvent swab (hexane) and final rinse of Alconox and water. Contaminated cleaning materials (rags) will be added to the impacted material for disposal. Used solvent and rinse water will be containerized and disposed at an appropriate facility.

Confirmatory Sampling

Once the removal of the contaminated material is complete, BrightFields will verify the removal of PCB-impacted material in accordance with 40 CFR 761 Subpart O and a Remedial Action Work Plan approved by DNREC-SIRS. The remediation areas will be sampled to verify that the High Occupancy target concentration of 1 ppm or less of PCBs has been met. The grid systems that were previously used for the additional characterization will be offset by 0.5 meters in the north/south and east-west directions (see Figures 3 through 6). If concrete remains in place, BrightFields will use the same hammer drill technique as described above to collect confirmatory samples to a depth of 7.5 cm at each grid node. If concrete subbase/soil remains, confirmatory samples will be collected using dedicated scoops to a depth of 7.5 cm at each grid node. For locations where conduit/drainpipe was removed, underlying soil/subbase will be sampled in one-meter intervals in the same manner as described above. For Quality Assurance/Quality Control (QA/QC) purposes, one duplicate sample and one matrix spike/matrix spike duplicate (MS/MSD) sample will be collected per transformer location and per sample media type, and one equipment (rinse blank) will be collected for every 20 samples. In addition to QA/QC samples collected by field personnel, TestAmerica will conduct internal QA/QC procedures as appropriate, utilizing laboratory control samples/laboratory control sample duplicates (LC/LCSD), method blanks, and other techniques as required by the extraction and analysis method.



All confirmatory samples and QA/QC samples will be submitted to TestAmerica. Sample extraction will be performed using EPA Method 3540C and sample analysis will be performed using EPA Method 8082. BrightFields is confident that a formal data validation will not be necessary for this project. BrightFields' Technical Director will review the laboratory case narrative for each set of confirmatory data for inconsistencies or non-conformities. If necessary, re-extraction or re-analysis of the sample(s) in question will be requested to ensure that the data are sound and of high quality.

Should any samples fail to achieve the High Occupancy standard, the impacted area will be excavated to one foot below the current grade and to the new "clean edge." The excavated area will then be re-sampled in accordance with 40 CFR Subpart O.

Waste Disposal

PCB impacted materials (greater than 1 ppm PCBs) including building materials, PPE, decontamination materials and tools that cannot be decontaminated, will be bulked in plastic-lined roll-off containers and properly placarded for transport. Any decontamination fluids generated will be drummed and characterized for disposal at an appropriate facility. A licensed hazardous waste hauler will be utilized to transport the impacted materials to Modern Landfill of Buffalo, New York, a facility licensed and permitted to accept PCB impacted materials. The waste will be properly manifested, and copies of the manifests and certificates of disposal will be retained by BrightFields.

REPORTING AND PROJECT SCHEDULE

Upon completion of remediation activities and receipt of post-excavation data, BrightFields will prepare a PCB Removal Report which will include a summary of additional site characterization activities, PCB removal activities, and confirmatory sample results along with all supporting documentation. All laboratory analytical packages and manifests will be maintained in BrightFields' and DNREC-SIRS' respective project files. A written certification (pursuant to 40 CFR 761.61(a)(3)(i)(E)) and a Site access agreement is included with this notification as Attachment B and will be maintained with the project file.

It is anticipated that after completion of all Self-Implementing Cleanup Activities, the remainder of the basement foundations will be demolished and the native grade restored using DNREC-approved clean fill material (if incoming fill is required by then engineering plans). Because DNREC enforces a lower standard (0.23 ppm total PCBs) than TSCA (1 ppm for PCBs) in soil/material, the remainder of the basement flooring will be segregated from other demolition debris to prevent recycling and re-use as "approved clean fill". Concrete flooring originating from the basement electrical rooms that is not disposed as bulk remediation waste will be disposed as non-hazardous construction and demolition (C&D) waste at a facility approved to accept such material.

The additional characterization activities and removal actions are anticipated to begin in late fall 2018 and expected to continue through early 2019. Work will not proceed until any EPA



comments are addressed, or if no comments are received regarding this notification, after the 30-day comment period has expired.

Please don't hesitate to call the undersigned at (302) 656-9600 if you have any questions.

Sincerely,

BrightFields, Inc.

A handwritten signature in blue ink, appearing to read 'Amanda Finnerty', written over a light blue horizontal line.

Amanda Finnerty
Project Manager

A handwritten signature in blue ink, appearing to read 'Gregg Crystall', written over a light blue horizontal line.

Gregg Crystall
Senior Project Director

Enclosures:

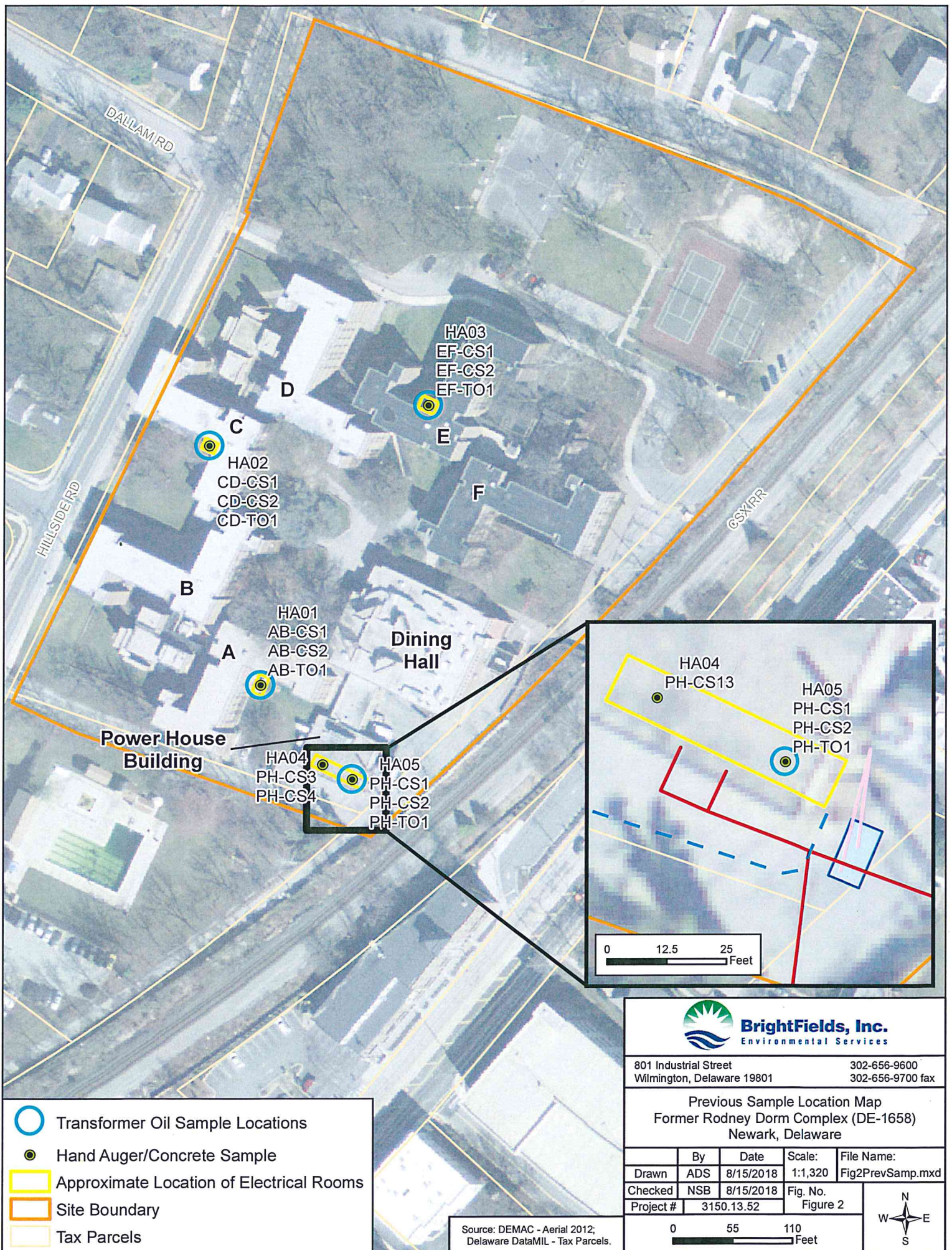
- Figure 1 – Site Location/Topographic Map
- Figure 2 – Previous Sample Location Map
- Figure 3 – Proposed Sample Location – Power House
- Figure 4 – Proposed Sample Location – Building A
- Figure 5 – Proposed Sample Location – Building C
- Figure 6 – Proposed Sample Location – Building E

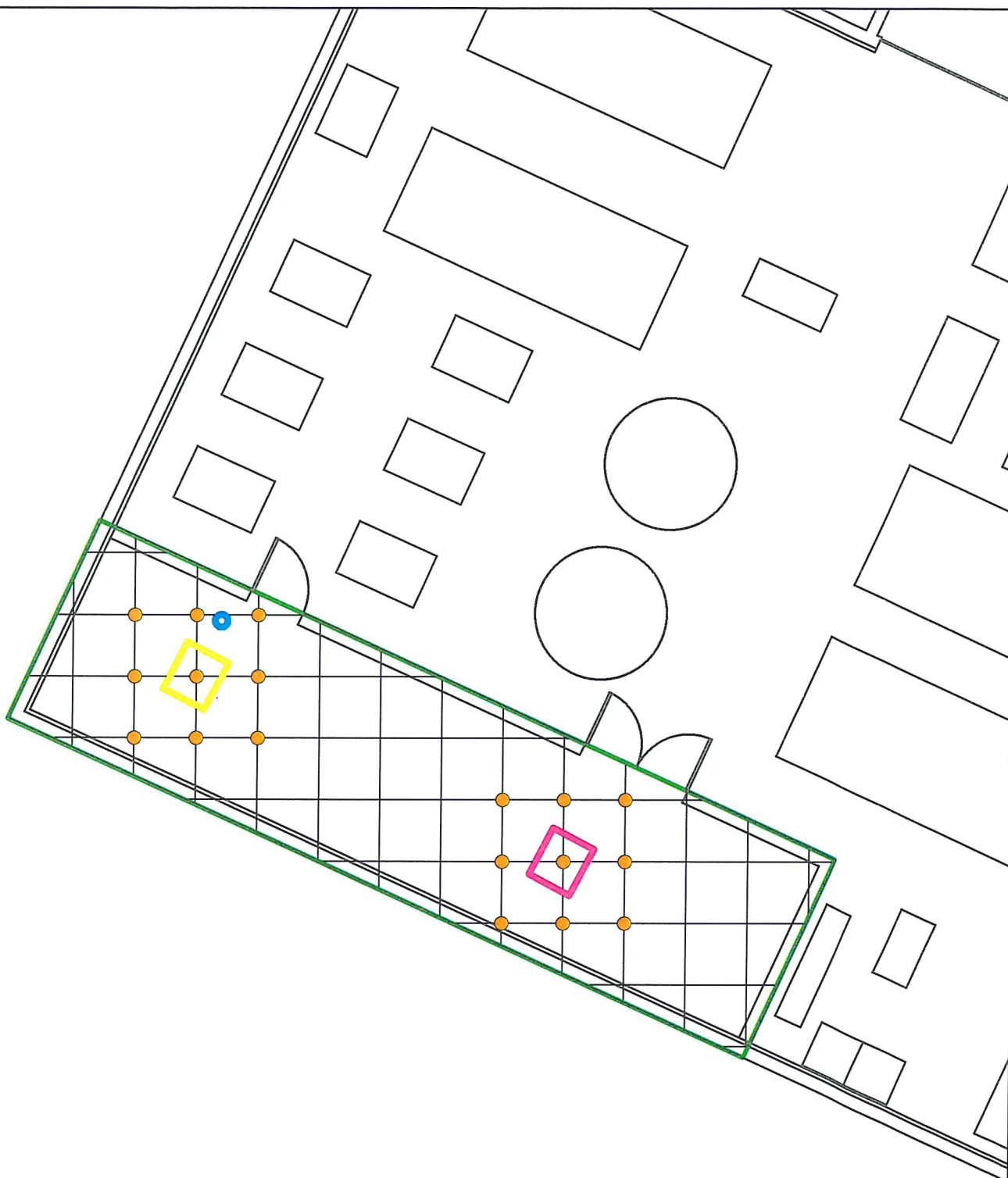
- Table 1 – TestAmerica Concrete Pad/Slab Analytical Results - PCBs
- Table 2 – TestAmerica Soil Analytical Results - Organics
- Table 3 – TestAmerica Transformer Oil Sample Analytical Results - PCBs

- Attachment A – TestAmerica Laboratory Analytical Packages
- Attachment B – Written Certification and Site Access Agreement



FIGURES





- Proposed Sample Locations
- Power House Building Plans
- Approximate Location of Active Transformer (PH1)
- Approximate Location of Former Transformer/Emergency Generator (PH2)
- Approximate Location of Floor Drain/Conduit
- PCB Sample Area
- Grid 1m X 1m

Source:
Base map provided by JMT, Inc;



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801 Industrial Street
Wilmington, Delaware 19801

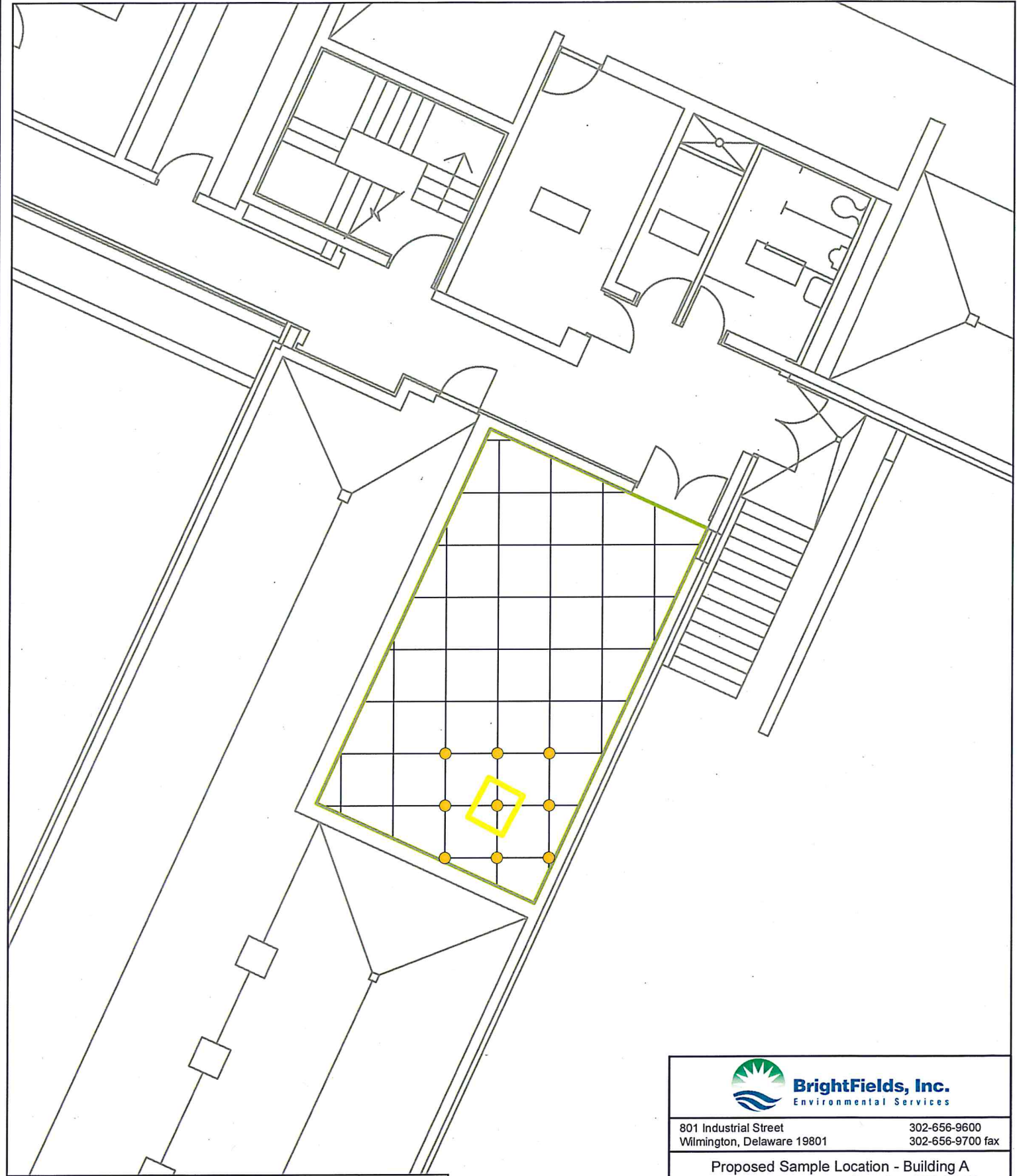
302-656-9600
302-656-9700 fax

Proposed Sample Location - Power House
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

	By	Date	Scale:	File Name:
Drawn	ADS	8/20/2018	1:96	Fig3PwrHse.mxd
Checked	NSB	8/20/2018	Fig. No.	
Project #	3150.13.52		Figure 3	

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Feet





- Proposed Sample Locations
- Building A Plans
- Approximate Location of Active Transformer A/B
- ▭ PCB Sample Area
- ▭ Grid 1m X 1m

Source:
Base map provided by JMT, Inc;



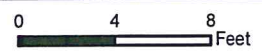
BrightFields, Inc.
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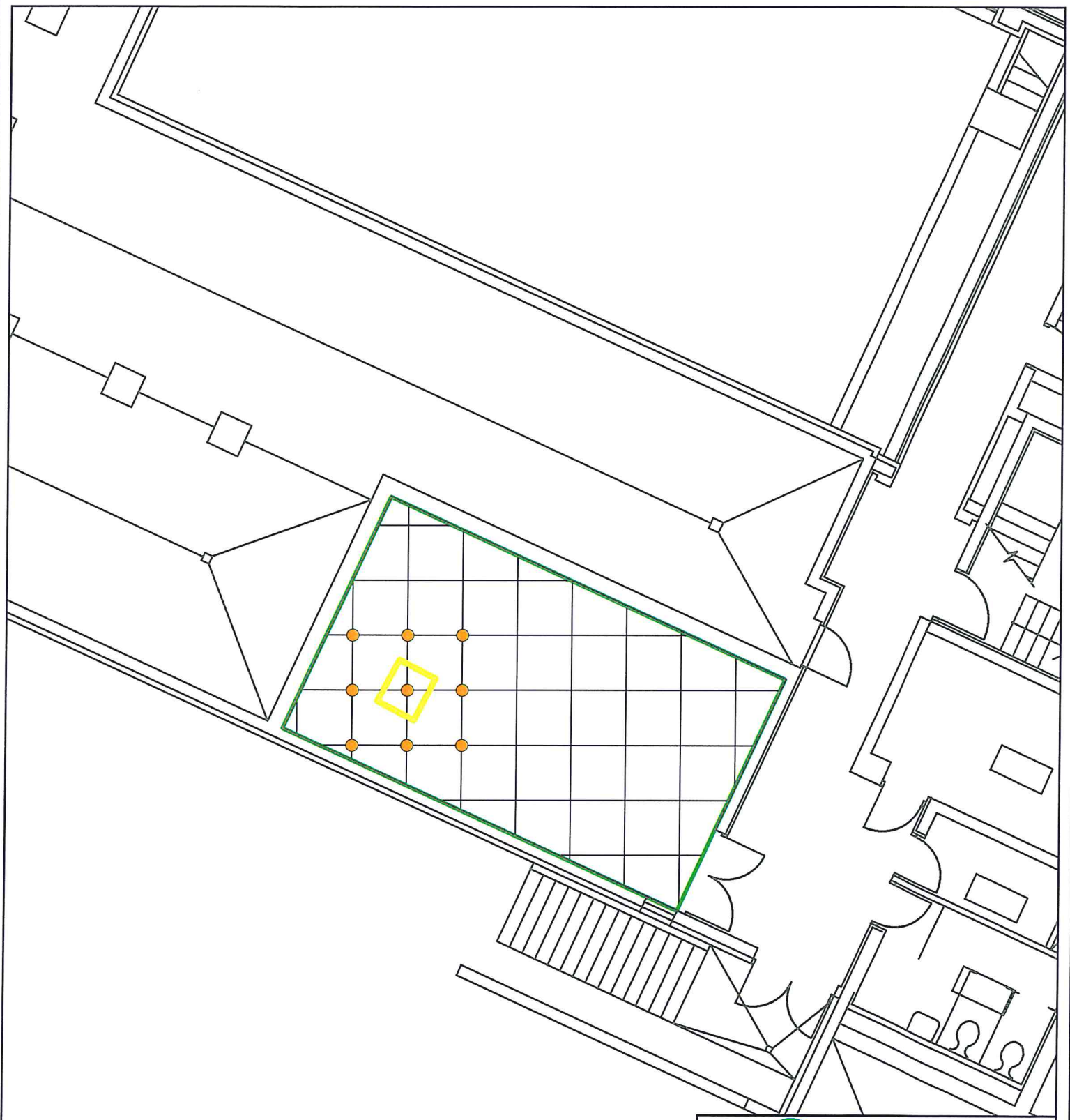
801 Industrial Street
Wilmington, Delaware 19801

302-656-9600
302-656-9700 fax

Proposed Sample Location - Building A
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

	By	Date	Scale:	File Name:
Drawn	ADS	8/22/2018	1:96	Fig4BldgA.mxd
Checked	ALF	8/22/2018	Fig. No.	
Project #	3150.13.52		Figure 4	





- Proposed Sample Locations
- Building C Plans
- Approximate Location of Active Transformer C/D
- PCB Sample Area
- Grid 1m X 1m



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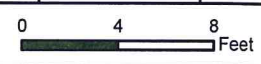
801 Industrial Street
Wilmington, Delaware 19801

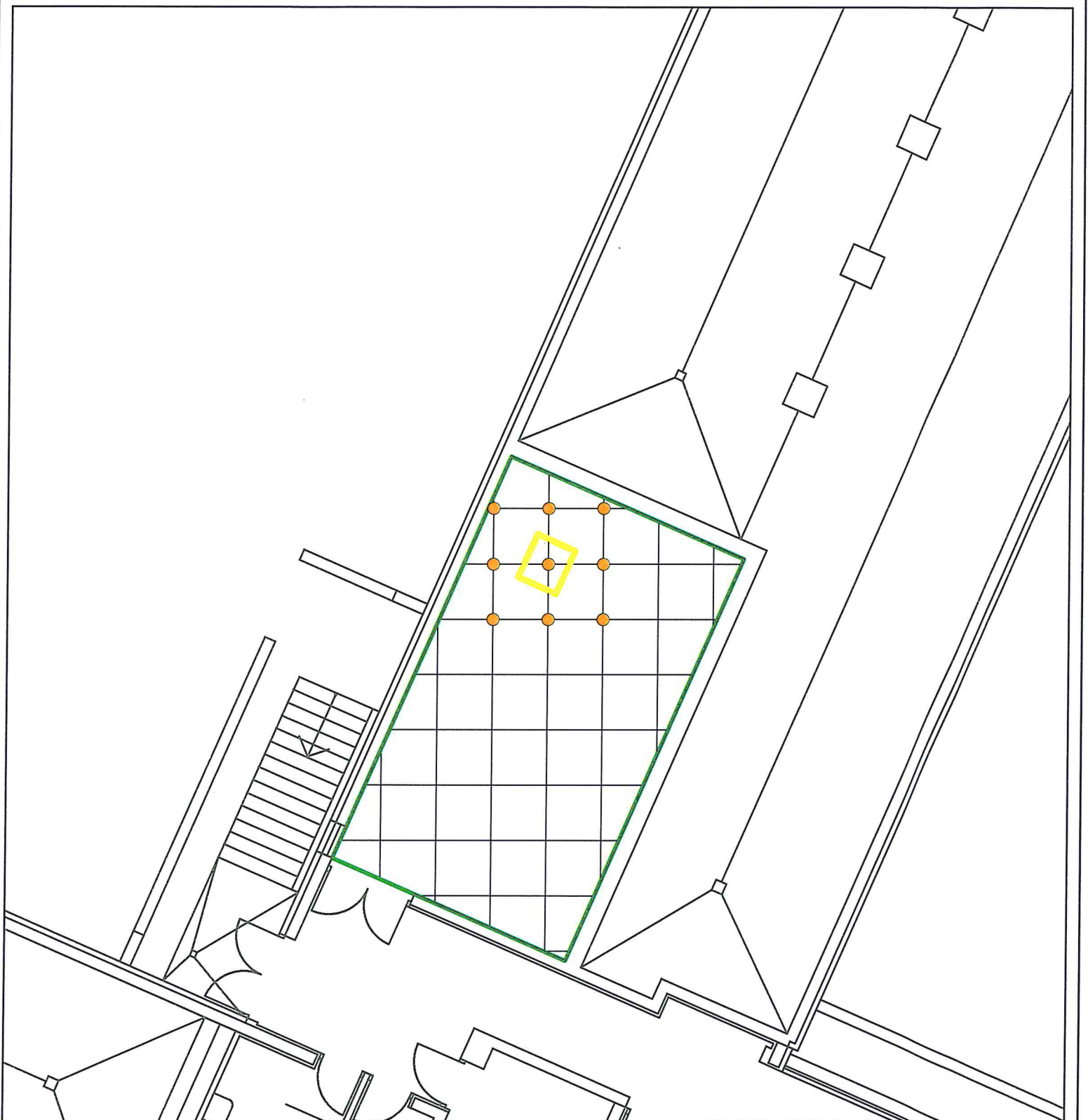
302-656-9600
302-656-9700 fax

Proposed Sample Location - Building C
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

	By	Date	Scale:	File Name:
Drawn	ADS	8/20/2018	1:96	Fig5BldgC.mxd
Checked	NSB	8/20/2018	Fig. No.	
Project #	3150.13.52		Figure 5	


Source:
Base map provided by JMT, Inc;





- Proposed Sample Locations
- Building E Plans
- Approximate Location of Active Transformer E/F
- PCB Sample Area
- Grid 1m X 1m

Source:
Base map provided by JMT, Inc;



BrightFields, Inc.
 Environmental Services

801 Industrial Street Wilmington, Delaware 19801			302-656-9600 302-656-9700 fax	
Proposed Sample Location - Building E Former Rodney Dorm Complex (DE-1658) Newark, Delaware				
	By	Date	Scale:	File Name:
Drawn	ADS	8/20/2018	1:96	Fig6BldgE.mxd
Checked	NSB	8/20/2018	Fig. No.	Figure 6
Project #	3150.13.52			

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TABLES

TABLE 1
TestAmerica Concrete Pad/Slab Sample Analytical Results - PCBs
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

Sample ID	RD-AB-CS1	RD-AB-CS2	RD-CD-CS1	RD-CD-CS2	RD-EF-CS1
Sampling Depth (ft - ft)	0.0 - 0.5	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0
Sample Date	8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Matrix	Concrete Dust	Concrete Dust	Concrete Dust	Concrete Dust	Concrete Dust
Surface Conditions	Minor Staining	No Staining	No Staining	Minor Staining	No Staining
Analyte					
POLYCHLORINATED BIPHENYLS (PCBs) (EPA METHOD 8082) (mg/kg)					
Aroclor-1016	0.23	0.0094	0.0091	0.0090	0.0091
Aroclor-1221	0.23	0.0094	0.0091	0.0090	0.0091
Aroclor-1232	0.23	0.0094	0.0091	0.0090	0.0091
Aroclor-1242	0.23	0.0094	0.0091	0.0090	0.0091
Aroclor-1248	0.23	0.0094	0.0091	0.0090	0.0091
Aroclor-1254	0.24	0.0097	0.0094	0.0093	0.0094
Aroclor-1260	19	0.060	0.0094	0.93	0.0094

Notes:

NA - Not Analyzed
D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U - Indicates the analyte was analyzed for but not detected.

TABLE 1
TestAmerica Concrete Pad/Slab Sample Analytical Results - PCBs
Former Rodney Dorn Complex (DE-1658)
Newark, Delaware

Sample ID	RD-EF-CS2	RD-PH-CS1	RD-PH-CS2	RD-PH-CS3	RD-PH-CS4
Sampling Depth (ft - ft)	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0	0.0 - 2.0
Sample Date	8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Matrix	Concrete Dust	Concrete Dust	Concrete Dust	Concrete Dust	Concrete Dust
Surface Conditions	Minor Staining	Minor Staining	No Staining	No Staining	Minor Staining
Analyte					
POLYCHLORINATED BIPHENYLS (PCBs) (EPA METHOD 8082) (mg/kg)					
Aroclor-1016	0.0091	0.0091	0.0090	0.0091	0.0091
Aroclor-1221	0.0091	0.0091	0.0090	0.0091	0.0091
Aroclor-1232	0.0091	0.0091	0.0090	0.0091	0.0091
Aroclor-1242	0.0091	0.0091	0.0090	0.0091	0.0091
Aroclor-1248	0.0091	0.0091	0.0090	0.0091	0.0091
Aroclor-1254	0.0094	0.0094	0.18	0.0094	0.0094
Aroclor-1260	0.0094	0.72	0.0093	0.0094	0.34

Notes:

NA - Not Analyzed
D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U - Indicates the analyte was analyzed for but not detected.

TABLE 2
TestAmerica Soil Analytical Results - Organics
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

Sample ID	Sample Date	Sampling Depth (ft - ft bgs)	DNREC-SIRS Soil Screening Levels (July 2016) mg/kg	RD-HA01-S001 8/15/2017 1.2 - 2.0 mg/kg Soil	RD-HA02-S001 8/15/2017 0.5 - 2.0 mg/kg Soil	RD-HA04-S001 8/16/2017 1.5 - 2.0 mg/kg Soil	RD-HA04-S002 8/16/2017 2.5 - 3.5 mg/kg Soil	RD-HA05-S001 8/16/2017 1.5 - 2.0 mg/kg Soil
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Analyte			Soil	Soil	Soil	Soil	Soil	Soil
POLYCHLORINATED BIPHENYLS (PCBs) BY EPA METHOD 680 (HOMOLOGS)								
Total Hexachlorobiphenyls			nca	0.0088	F1	NR	NR	NR
Total Pentachlorobiphenyls			nca	0.0035	J F1 F2	NR	NR	NR
Total PCBs			0.23	0.012		NR	NR	NR
No other PCBs by EPA Method 680 were identified above laboratory method detection								
POLYCHLORINATED BIPHENYLS (PCBs) BY EPA METHOD 8082								
No PCBs by EPA Method 8082 were identified above laboratory method detection limits.								

Notes:

Shaded - Concentration exceeds respective DNREC-SIRS July 2016 Screening Level.

nca - No criteria available.

F1 - MS and/or MSD Recovery is outside acceptance limits.

F2 - MS/MSD RPD exceeds control limits.

U - Indicates the analyte was analyzed for but not detected.

p - The %RPD between the primary confirmation column/detector is >40%. The higher value has been reported.

NR - Not analyzed.

TABLE 3
TestAmerica Transformer Oil Sample Analytical Results - PCBs
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware

Sample ID	RD-AB-TO1	RD-CD-TO1	RD-EF-TO1	RD-PH-TO1
Sample Date	8/16/2017	8/16/2017	8/16/2017	8/16/2017
Units	mg/kg	mg/kg	mg/kg	mg/kg
Matrix	Transformer Oil	Transformer Oil	Transformer Oil	Transformer Oil
Dilution Factor	10	20	25	1
Analyte				
POLYCHLORINATED BIPHENYLS (PCBs) (EPA METHOD 8082) (mg/kg)				
Aroclor-1016	1.6 U	3.3 U	4.1 U	0.17 U
Aroclor-1221	2.1 U	4.3 U	5.3 U	0.22 U
Aroclor-1232	2.5 U	5.1 U	6.3 U	0.26 U
Aroclor-1242	1.6 U	3.3 U	4.1 U	0.17 U
Aroclor-1248	1.6 U	3.3 U	4.1 U	0.17 U
Aroclor-1254	1.6 U	3.3 U	4.1 U	0.17 U
Aroclor-1260	76 D	330 D	390 D	0.17 U
Aroclor-1268	2.8 U	5.6 U	6.9 U	0.28 U
Aroclor-1262	2.8 U	5.6 U	6.9 U	0.28 U
Total PCBs	76 D	330 D	390 D	0.28 U

Notes:

nca - no criteria available
D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
U - Indicates the analyte was analyzed for but not detected.

Self-Implementing PCB Cleanup Notification/Cleanup Plan
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware



BrightFields, Inc.

ATTACHMENT A

Self-Implementing PCB Cleanup Notification/Cleanup Plan
Former Rodney Dorm Complex (DE-1658)
Newark, Delaware



BrightFields, Inc.

ATTACHMENT B



BrightFields, Inc.
Environmental Services

Certification

40 CFR 761.61(a)(3)(i)(E)

The undersigned owner of the property where the cleanup site is located and the party conducting the cleanup certify that all sampling plans, sampling collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analyses procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the location indicated below and are available for EPA inspection, as set forth below.

Document Location

Delaware Department of Natural Resources and Environmental Control

Site Investigation and Restoration Section

391 Lukens Drive

New Castle DE 19720

Property Owner

Party Conducting the Cleanup

_____ Authorized Signature	_____ Date	_____ Authorized Signature	_____ Date
_____ Name of Authorized Representative (print)		_____ Name of Authorized Representative (print)	
_____ Title		_____ Title	